IN THE CLAIMS

1. (currently amended): A method comprising:

converting a first gamut in a CMY color space to a first gamut in a CMYK color space;

converting the first gamut in CMYK color space to a gamut in a color space having a lightness component;

rescaling a lightness component of a gamut value in the color space having a lightness component to form a modified gamut; and

converting the modified gamut to a second gamut in a CMYK color space.

2. (currently amended): The method of claim 1, wherein rescaling a lightness component of a gamut value in the color space having a lightness component to form a modified gamut comprises:

B1 modifying the gamut in the color space having a lightness component by changing a lightness component of a color value in the color space having a lightness component such that an upper surface of the first gamut in the CMY ~~CMYK~~ color space is preserved and a lower surface of the first gamut in the CMY ~~CMYK~~ color space is mapped to a bottom surface of the gamut of ~~the~~ a full CMYK color space to form an expanded gamut in the color space having a lightness component.

3. (currently amended): The method of claim 2, wherein said converting a first gamut in a CMY color space to a first gamut in a CMYK color space comprises:

applying a black generation method to the gamut in the first CMY color space to form the first gamut in the CMYK color space.

4. (currently amended): A method comprising:

converting a first gamut in a CMY color space having an upper surface and a lower surface to a first gamut in a CMYK color space;

converting the first gamut in the CMYK color space to a gamut in a CIELAB color space, the gamut in the CIELAB color space having a lightness component;

modifying the gamut in the CIELAB color space by changing the lightness component such that the upper surface of the first gamut in the CMY ~~CMYK~~ color space is preserved and the lower surface of the first gamut in the CMY ~~CMYK~~ color space is mapped to the bottom surface of the gamut of ~~the~~ a full CMYK color space to form a gamut in an expanded CIELAB color space; and

transforming the gamut in the expanded CIELAB color space to form a second gamut in the CMYK color space.

5. (previously presented): The method of claim 4, wherein converting a gamut in a CMY color space having an upper surface and a lower surface to a gamut in a CMYK color space having a bottom surface comprises:

applying a black generation method to the gamut in the CMY color space to form the first gamut in the CMYK color space.

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6. (previously presented): The method of claim 5, wherein applying a black generation method to the gamut in the CMY color space to form the first gamut in the CMYK color space comprises:

applying Gray Component Replacement (GCR) to the gamut in the CMY color space to form the first gamut in the CMYK color space.

Claims 7-10 (canceled):

11. (currently amended): The method comprising:

transforming ~~the~~ a CMY space gamut to obtain a first CMYK space gamut by including a black colorant in the CMY space gamut;

transforming the first CMYK space gamut to form a CIELAB space gamut by printing a plurality of patches and measuring each of the plurality of patches to obtain the CIELAB space gamut;

changing a lightness component of the CIELAB space gamut to form an enhanced CIELAB space gamut; and

transforming the enhanced CIELAB space gamut to form a second CMYK space gamut.

12. (previously presented): The method comprising:

transforming a CMY space gamut to a first CMYK space gamut by including a black colorant in the CMY space gamut to form the CMYK space gamut;

transforming the first CMYK space gamut into a CIELAB space gamut by computing the CIELAB space gamut from a model capable of mapping the CMYK space gamut into the CIELAB space gamut;

changing a lightness component of the CIELAB space gamut to form an enhanced CIELAB space gamut; and

B1 transforming the enhanced CIELAB space gamut to form a second CMYK space gamut.

13. (canceled):

14. (previously presented): The method of claim 12, wherein changing the lightness component of the CIELAB space gamut comprises:

linearly rescaling the lightness component of the CIELAB space gamut.

15. (original): The method of claim 14, wherein linearly rescaling the lightness component in the CIELAB space comprises:

computing a rescaling factor that is a function of an L_{min}, an L_{max}, and an L_{mincmy}.

Claims 16 - 21 (canceled)

22. (previously presented): The method of claim 11, wherein changing the lightness component of the CIELAB space gamut comprises:

linearly rescaling the lightness component of the CIELAB space gamut.

23. (previously presented): The method of claim 22, wherein linearly rescaling the lightness component in the CIELAB space comprises:

computing a rescaling factor that is a function of an L_{min}, an L_{max}, and an L_{mincmy}.